

**Amendments to the Specification**

Please replace paragraph [0026] with the following rewritten paragraph:

[0026] Then, in S3, the master pressure  $P_m$  which is the present hydraulic pressure of the master cylinder 22 is detected. As in the case of the pedal stroke ST, the master pressure  $P_m$  has already been detected as the detection value obtained by the master pressure sensor 54, and has already been stored in the RAM152. The master pressure  $P_m$  is also one type of the operation state amounts of the operating member, and is used as the operating force related amount. The master pressure  $P_m$  is a relative pressure with the atmospheric pressure. The master pressure  $P_m$  is "0" when the brake pedal 20 is not depressed, and increases with an increase in the depressing amount. In step S4, the master pressure corresponding target vehicle deceleration  $G_{pm}^*$  which corresponds to the detected master pressure  $P_m$  is read from the  $P_m$ - $G_{pm}^*$  map stored in the ROM 154. In the embodiment, in the  $P_m$ - $G_{pm}^*$  map, the target vehicle deceleration  $G_{pm}^*$  increases substantially linearly with an increase in the master pressure  $P_m$ , as shown in Fig. 6.

Please replace paragraph [0027] with the following rewritten paragraph:

[0027] In the embodiment, the target vehicle deceleration  $G^*$  is decided as the weighting sum of  $G_{ST}^*$  and  $G_{pm}^*$ . In S5, the weighting coefficient  $\alpha$  ~~which is the coefficient for weighting~~ is read from the weighting coefficient map stored in the ROM 154. As shown in FIG. 7, the weighting coefficient  $\alpha$  is related to the master pressure corresponding vehicle target deceleration  $G_{pm}^*$ . The value of the weighting coefficient  $\alpha$  corresponding to  $G_{pm}^*$  read in S4 is read from the weighting coefficient map. In the embodiment, the weighting coefficient  $\alpha$  is a value equal to or larger than "0" and also equal to or smaller than "1", and

the value of the weighting coefficient  $\alpha$  increases with an increased in  $G_{pm}^*$ . In S6, the target vehicle deceleration  $G^*$  is obtained according to the following equation.

$$G^* = \alpha \times G_{pm}^* + (1 - \alpha) \times G_{ST}^*$$